**Tuesday, May 25, 2004** 

## California company first to test pieces of Columbia debris

## ▲ First Debris Study Underway: The first pieces of Space Shuttle Columbia debris loaned to a nongovernmental agency for testing and research are on their way from KSC to The Aerospace Corporation in El Segundo, Calif. The Aerospace Corporation requested graphite/epoxy honeycomb skins from an Orbital Maneuvering System pod, Main Propulsion System Helium tanks, a Reaction Control System Helium tank and a Power Reactant Storage Distribution system tank. The company intends to use the parts to study reentry effects on composite materials. NASA notified the Columbia crew's families about the loan before releasing the items for study.

Researchers believe the testing will show how materials are expected to respond to various heating and loads' environments. The findings will help calibrate tools and models used to predict hazards to people and property from reentering hardware. The Aerospace Corporation will have the debris for one year to perform analyses to estimate maximum temperatures during reentry based upon the geometry and mass of the recovered composite.

▲ Shuttle Update: Following the installation of the left-hand Orbital Maneuvering System pod on Discovery, technicians began installing the



thrusters last week. The Forward Reaction Control System is scheduled to be delivered to the OPF early this week.

Thermal Protection System blanket installation continues on **Atlantis'** Reinforced Carbon-Carbon nose cap. The nose cap was removed from the vehicle and sent back to the vendor for thorough Non-Destructive Engineering evaluation and recoating. The blankets are being reinstalled prior to technicians re-hanging the nose cap on the vehicle.

◆ Invitation — KSC RehabWorks and The Bionetics Corporation invite you to attend the grand opening of the newly expanded facility from 10:30 – 11 a.m. Thursday in the O&C Mission Briefing Room. Open house follows from 11 a.m. – 3 p.m. at the new facility located in O&C/1135.



◆ Holiday Schedule — KSC Countdown will not be published on June 1 due to the Memorial Day holiday. Look for

the June 3 issue.

◆ Did You Know? You can save energy, dollars and the environment. An added benefit to reducing electric consumption is the direct relationship to pollution: If we reduce electricity,

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## Return to Flight work continues on both Discovery and Atlantis

then we burn less fossil fuel. If you see energy being wasted, get involved, contact your facility manager. If you have good energy-saving ideas, please contact the SGS Energy Management Office at mail code SGS-636. Who knows, maybe you could be the next Energy Eagle Award recipient!

With the recent increases in gasoline, diesel and natural gas prices, it is important that everyone take the initiative to reduce energy consumption. It takes commitment from everyone at the Spaceport to help KSC and CCAFS save energy dollars; therefore, please remember to:

- Turn off your computer, or at least the monitor, when you leave.
- Turn off the lights in your office, the hall and hall closet lights on your way out, if you are the last person to leave your area.
- Turn off displays and decorative lights.
- Turn off or unplug any appliances in the office, such as coffee makers, desk lamps, fans, radios, etc.
- Turn off the copier machines (including in hallways) and scanners.
- Close the blinds on all windows.
- Stop water leaks and help the pumps run less.
- Set back thermostats (with facility manager approval) in unoccupied areas.